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10/598,223

08/22/2006

Herbert E. Schwartz

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10/07/2011

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EXAMINER

LEVINE, JOSHUA H

ART UNIT

PAPER NUMBER

3774

MAIL DATE

DELIVERY MODE

10/07/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 10/598,223 | Applicant(s) SCHWARTZ | |
| | Examiner JOSHUA LEVINE | Art Unit 3774 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 35,36,38-43,45-49 and 51-61 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 35,36,38-43,45-49 and 51-61 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 08/22/2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Amendment

1. This office action is responsive to the amendment filed on 02/28/2011. As directed by the amendment: claims 35, 36 and 46, have been amended, claims 1-34, 37, 44, 48 and 50 have been cancelled, and new claims 58-61 have been added. Thus, claims 35, 36, 38-43, 45-49 and 51-57 are presently pending in this application.\

Response to Arguments

2. Applicant's arguments filed 02/28/2011 have been fully considered but they are not persuasive. The applicant argues that Hayhurst and Fallin do not disclose where a flexible members transverses a cartilage replacement material multiple times. The examiner affirms the rejection as a suture 60 transverses a section of cartilage material between the anchors as well as through the back of the cartilage (see arrow, figure 17).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 35-36, 38, 43, 45-47, 49, and 54-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayhurst (5647874) in further view Fallin et al. (6972027).

5. Regarding claims 35-36, 38, 46-47 and 54, Hayhurst disclosed all the elements of the claim including a biocompatible anchor 110 (figure 19) shaped to site within tissue

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at the defect site and retain a section of cartilage replacement material 98 (figure 17) in the defect site as shown in figure 17, a biocompatible flexible member 118 (figure 19) traversing through said section of cartilage replacement material multiple times (column 10 lines 18-21), said flexible member being configured to attach to said section of replacement material at an attachment point 68 (figure 17), except for the flexible member threaded twice through the anchor to form at least two pulley mechanisms. Fallin teaches an anchor 56 (figure 7) with a flexible member 60 (figure 7) threaded through said anchor at least twice to form at least two pulley mechanisms and a slidable device 88 about said flexible member as shown in figure 7. The loop one starts at passageway 68A (figure 7) and ends at passageway 68B (figure 7). The second loop is between passageways 68B and passageway 68C. The opposite end 84 (figure 7) of said flexible member is looped around said flexible member 60 to form a sliding device 88 (figure 7) for adjusting said distance between attachment point 58 (figure 7) and said anchor. The sliding device is a slipknot fashioned around flexible member 60 (figure 7). A slipknot is a knot that can easily be made tighter or looser by pulling one of its ends (Cambridge Advanced Learners Dictionary). Knot 88 can be made tighter by tensioning free end 92 (figure 7, column 6 lines 43-44). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to include the two loops and the knots, as suggested and taught by Fallin, for the purpose of creating loops and knots that allow slack in the flexible member for easy placement of the anchors as well as a mechanism to retract the slack in order to sufficiently tightly close tears to ensure proper healing (column 8 lines 28-323, column 8 lines 38-41).

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6. Regarding claim 43, 45 and 49-50, Fallin teaches a flexible member that further comprises a stopping member 88 (figure 15 column 6 lines 41-48), said stopping member engageable with said section of cartilage replacement material where the stopping device is a slipknot. It would be obvious to one of ordinary skill in the art at the time of the invention to include the stopping member in order to create a device that allows for a sufficiently tight closure of the cartilage replacement material to the bone to ensure proper healing.
7. Regarding claim 55, Hayhurst disclosed wherein the section of cartilage replacement material comprises a scaffold 99 (tissue, figure 18), the scaffold being fabricated from a biocompatible material, tissue being capable of facilitating at least one of chondral and osteochondral integration.
8. Regarding claim 56, Hayhurst disclosed wherein the device further comprises the section of cartilage replacement material 98 (unattached tissue, figure 17, cartilage column 1 line 16).
9. Regarding claim 57, Hayhurst disclosed wherein the sliding device comprises a lockable sliding device 88 (loop, figure 7; securely locks suture 60 to anchor, column 8 lines 58-60).
10. Regarding claims 58 and 60, Fallin teaches wherein mechanically locked comprises at least one of tied, integrally molded, and glued (tied via knot 126, figure 19).

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11. Regarding claims 59 and 61, Fallin teaches wherein mechanically locked comprises attached to a base 98 (meniscus, figure 18) attached to the section of cartilage replacement material.

12. Claims 39-41, and 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayhurst (5647874) in further view Fallin et al. (6972027) in further view of Binette et al (PG Pub no. 20050113937). Binette teaches a section of cartilage replacement material that is formed at least in part of a material selected from the group consisting of polyethylene and chitosan (paragraph 42). It would be obvious to one of ordinary skill in the art at the time of the invention to include these materials, as suggested and taught by Binette, for the purpose of facilitating cohesion of tissue fragments to allow an implant to take a semi-solid form allowing it to be cured into a solid implant.

13. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayhurst (5647874) in further view Fallin et al. (6972027) in further view of Wolf et al (PG Pub no. 20040267314). Wolf teaches a flexible member that is a braided suture (paragraph 22). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the braided sutures, as suggested and taught by Wolf, for the purpose of allowing more flexibility to maneuver in surgical applications while adding tensile strength to the suture (paragraph 22).

Conclusion

14. This is a request for continuing examination of applicant's earlier Application No. 10598223. All claims are drawn to the same invention claimed in the earlier application

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and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA LEVINE whose telephone number is (571)270-5413. The examiner can normally be reached on Monday-Thursday 7:30am-5:00pm ETA.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. L./
Examiner, Art Unit 3774

/DAVID ISABELLA/
Supervisory Patent Examiner, Art
Unit 3774